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**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No: Q92551

Roberto CAPUTO, et al.

Appln. No.: 10/563,873

Group Art Unit: Unknown

Confirmation No.: Unknown

Examiner: Unknown

Filed: January 09, 2006

For: HOLOGRAPHIC DIFFRACTION GRATING, PROCESS FOR ITS PREPARATION  
AND ELECTRO-OPTICAL DEVICES INCLUDING THE SAME

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 C.F.R. §§ 1.97 and 1.98**

**MAIL STOP AMENDMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

One copy of each of the listed documents is submitted herewith, except for the following:  
U.S. patents and/or U.S. patent publications; and co-pending non-provisional U.S. applications filed after June 30, 2003.

The present Information Disclosure Statement is being filed: (1) No later than three months from the application's filing date; (2) Before the mailing date of the first Office Action on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after

INFORMATION DISCLOSURE STATEMENT  
U.S. Appln. No.: 10/563,873

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filng a request for continued examination (RCE) under §1.114, and therefore, no Statement under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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WASHINGTON OFFICE  
**23373**  
CUSTOMER NUMBER

Date: April 21, 2006



**Substitute for Form 1449 A & B/PTO**

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Substitute for Form 1449 A & B/PTO		<i>SEARCHED, SERIALIZED, INDEXED, FILED U.S. PATENT AND TRADEMARK OFFICE</i>		Complete if Known	
<b><u>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</u></b>					
(use as many sheets as necessary)					
Sheet	1	of	2	Application Number	10/563,873
				Confirmation Number	Unknown
				Filing Date	January 09, 2006
				First Named Inventor	Roberto CAPUTO
				Art Unit	Unknown
				Examiner Name	Unknown
				Attorney Docket Number	Q92551

## **U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code <sup>2</sup> (if known)		
		US 4,891,152	B1	01-02-1990	Miller et al.
		US 4,938,568	B1	07-03-1990	Margerum et al.
		US 5,096,282	B1	03-17-1992	Margerum et al.
		US 5,867,238	B1	02-02-1999	Miller et al.
		US 5,942,157	B1	08-24-1999	Sutherland et al.
		US			

## **FOREIGN PATENT DOCUMENTS**

## **NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation <sup>6</sup>
		V.P. TONDIGLIA, L.V. NATARAJAN and R.L. SUTHERLAND, Volume holographic image storage and electro-optical readout in a polymeric-dispersed liquid-crystal film, 1995 Optical Society of America, June 1, 1995/Vol. 20, No. 11/ OPTICS LETTERS, Wright Laboratory, Wright-Patterson Air Force Base, Ohio 45433-7702.	
		L.V. NATARAJAN, R.L. SUTHERLAND, V.P. TONDIGLIA, T.J. BUNNING, Electro-Optical Switching Characteristics Of Volume Holograms In Polymer Dispersed Liquid Crystals, Journal of Nonlinear Optical Physics and Materials, (1996) pages 89-98, Vol. 5, No. 1, Science Applications International Corporation, 101 Woodman Drive, Dayton, OH 45431.	



## U.S. PATENT DOCUMENTS

## FOREIGN PATENT DOCUMENTS

## **NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation <sup>6</sup>
		R.L. SUTHERLAND, L.V. NATARAJAN, and V.P. TONDIGLIA, Bragg Gratings in an Acrylate Polymer Consisting of Periodic Polymer-Dispersed Liquid-Crystal Planes, 1993 American Chemical Society, Chem. Mater., 1533-1538, 1993, 5, Materials directorate, Wright Laboratory, Wright-Patterson Air Force Base, Ohio 45433-6533.	
		R.L. SUTHERLAND, V.P. TONDIGLIA, and L.V. NATARAJAN, Electrically switchable volume gratings in polymer-dispersed liquid crystals, 1994 American Institute of Physics, Appl. Phys. Lett. 64 (9), February 28, 1994, pages 1074-1076, Materials Directorate, Wright Laboratory, Wright-Patterson Air Force Base, Ohio 45433-6533.	
		R. CAPUTO, A.V. SUKHOV, C. UMETON, and R.F. USHAKOV, Formation of a Grating of Submicron Nematic Layers of Photopolymerization of Nematic-Containing Mixtures, Journal of Experimental and Theoretical Physics, pp. 1190-1197, Vol. 91, No. 6, 2000, Institute of Problems of Mechanics, Russian Academy of Sciences, Moscow, 117526 Russia.	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov), MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to indicate here if English language Translation is attached.